AMENDMENTS TO THE CLAIMS

Claims 1-12 (Cancelled)

Claim 13 (Previously Presented) A positive-working photoresist composition which comprises, as a uniform solution in an organic solvent:

(A) 100 parts by weight of a hydroxystyrene-based polymer which is a combination of:

(A1) a first polyhydroxystyrene resin having phenolic hydroxyl groups a part of which are substituted for the hydrogen atoms thereof by acid-dissociable alkoxyalkyl groups; and

(A2) a second polyhydroxystyrene resin having phenolic hydroxyl groups a part of which are substituted for the hydrogen atoms thereof by acid-dissociable groups selected from the group consisting of tertiary alkoxycarbonyl groups, tertiary alkyl groups and cyclic ether groups, and

wherein the weight proportion of the first polyhydroxystyrene resin (A1) to the second polyhydroxystyrene resin (A2) is in range from 2:8 to 9:1;

(B) from 1 to 20 parts by weight of a radiation-sensitive acid-generating compound;

(C) from 0.1 to 25 parts by weight of a polyvinyl ether compound susceptible to crosslinking, represented by the formula

$$X(\text{-O-CH=CH}_2)_n ,$$

in which the subscript n is a positive integer of 2, 3 or 4 and X is an n-valent organic residue derived from a molecule of alicyclic hydrocarbon compound by eliminating n hydrogen atoms;

(D) from 0.01 to 5 parts by weight of a carboxylic acid consisting of atoms of carbon, oxygen and hydrogen alone; and

(E) from 0.01 to 1 part by weight of an amine compound.

Claim 14 (Previously Presented) The positive-working photoresist composition as claimed

in claim 13 in which the carboxylic acid as the component (D)

is selected from the group consisting of aliphatic carboxylic acids, alicyclic carboxylic acids and aromatic carboxylic acids.

Claim 15 (Previously Presented) The positive-working photoresist composition as claimed in claim 14 in which the carboxylic acid as the component (D) is maleic acid, malonic acid, dodecanoic acid or salicylic acid.

Claim 16 (Previously Presented) The positive-working photoresist composition as claimed in claim 13 in which the amine compound as the component (E) is a secondary or tertiary aliphatic amine compound.

Claim 17 (Previously Presented) The positive-working photoresist composition as claimed in claim 16 in which the amine compound as the component (E) is a secondary or tertiary alkanol amine compound.

Claim 18 (Currently Amended) The positive-working photoresist composition as claimed in claim 13, wherein the polyvinyl ether ~~component~~ compound as the component (C) is ~~1,4-cyclohexanedimethanol~~ 1,4-cyclohexanedimethyl alcohol divinyl ether.

Claim 19 (Previously Presented) A method for the formation of a patterned resist layer on the surface of a substrate which comprises the steps of:

(a) coating the surface of a substrate with the positive-working photoresist composition which comprises, as a uniform solution in an organic solvent:

(A) 100 parts by weight of a hydroxystyrene-based polymer having phenolic hydroxyl groups or carboxyl groups as a resinous base ingredient of which at least a part of the phenolic hydroxyl groups or carboxyl groups are substituted for the hydrogen atoms thereof by acid-dissociable groups;

(B) from 1 to 20 parts by weight of a radiation-sensitive acid-generating compound;

(C) from 0.1 to 25 parts by weight of a polyvinyl ether compound susceptible to crosslinking, represented by the formula

$X(-O-CH=CH_2)_n$,

in which the subscript n is a positive integer of 2, 3 or 4 and X is an n-valent organic residue derived from a molecule of alicyclic hydrocarbon compound by eliminating n hydrogen atoms;

(D) from 0.01 to 5 parts by weight of a carboxylic acid consisting of atoms of carbon, oxygen and hydrogen alone; and

(E) from 0.01 to 1 part by weight of an amine compound.;

followed by drying to form a dried photoresist layer;

(b) exposing the dried photoresist layer on the substrate surface pattern-wise to light to form a latent image of the pattern;

(c) subjecting the photoresist layer after pattern-wise light exposure to a heat treatment;

(d) subjecting the photoresist layer to a development treatment with an aqueous alkaline solution as a developer to form a patterned resist layer; and

(e) subjecting the patterned resist layer to a heat treatment to effect diminution of the pattern size by thermal flow of the resist layer.

Claim 20 (Previously Presented) The method for the formation of a patterned resist layer as claimed in claim 19 in which the patterned resist layer exhibits a diminishing change in a dimension by increasing the temperature by an amount not exceeding 15 nm per degree centigrade of the temperature change.